# SUBDIVISION REGULATIONS Town of Holderness, New Hampshire TABLE OF CONTENTS

SECTION I	AUTHORITY AND PURPOSE		
	1.1 Authority 1.2 Purpose	3	
SECTION II	TITLE	4	
SECTION III	ADMINISTRATION	4	
	<ul><li>3.1 Enforcement</li><li>3.2 Penalties</li><li>3.3 Waiver</li><li>3.4 Conflict With Other Regulations</li><li>3.5 Validity</li><li>3.6 Adoption</li><li>3.7 Amendments</li></ul>	4 4 4 4 5 5 5	
SECTION IV	DEFINITIONS	5	
	4.1 - 4.31	5-9	
SECTION V	PROCEDURE	9	
	<ul> <li>5.1 Pre-Application</li> <li>5.2 Application</li> <li>5.3 Preliminary Plan</li> <li>5.4 Revision of Preliminary Plan</li> <li>5.5 <sup>1</sup>Abandonment or Resubmission</li> <li>5.6 Final Plat</li> <li>5.7 Completed Application</li> <li>5.8 Filing and Submission of Completed Application</li> <li>5.9 Board Action on Completed Application</li> <li>5.10 Public Hearing</li> <li>5.11 Surety Requirements or Bond</li> <li>5.12 Failure to Take Action</li> <li>5.13 Approval of Plats of Exempted Subdivisions</li> <li>5.14 Costs</li> </ul>	9 10 10 11 11 11 11 12 13 13 14 14 14	
	J.17 CUSIS	13	

7/25/2003

SECTION VI	GENERAL REQUIREMENTS FOR THE SUBDIVISION OF LAND				
	6.1 Plan Conformance	15			
	6.2 Unsafe Land	15			
	6.3 Pemi River Corridor Overlay				
	District	15			
	6.4 Special Flood Hazard Areas	16			
	6.5 Unsuitable Land	16			
	6.6 Part of a Lot	17			
	6.7 Lot Area	17			
	6.8 Determination of Soil Type	18			
	6.9 Lot Layout	18			
	6.10 Frontage	19			
	6.11 Shape of Lot	19			
	6.12 Building Lines	19			
	6.13 Waiver	20 - 21			
	6.14 Grading & Drainage	22			
	6.15 Easements	22			
	6.16 Recreational Areas	22			
	6.17 Reserve Strips	22			
	6.18 Sewage Disposal and Water Supply	22			
	6.19 Streets	23 - 24			
SECTION VII	IMPROVEMENT CONSTRUCTION REQUIREMENTS 25				
	7.1 Monuments	25			
	7.2 All Streets	25			
	7.3 7.6 Roads	26			
SECTION VIII	THE PRELIMINARY LAYOUT	27			
	8.1 8.14	27 - 28			
SECTION IX	FINAL PLAT	28			
	9.1 9.8	28 - 29			
KEY TO SOIL TYPES TABLE 1		30 - 31 32 - 34			
KEY TO SOIL I	DRAINAGE CLASSES	35 - 36			
INTENSITY SO	OIL MAP IDENTIFIER	37			
	SUBDIVISION REGULATIONS				

#### Town of Holderness, New Hampshire

#### SECTION I AUTHORITY AND PURPOSE

## 1.1 <u>Authority</u>

Pursuant to the authority vested in Holderness Planning Board by the voters of the Town of Holderness at a Special Town Meeting, held on May 26<sup>th</sup>, 1970, and in accordance with provisions of N.H. RSA 674:35-674:42, 675:8, 676:4, 16 & 18-I the Holderness Planning Board proposes the following regulations governing subdivision of land in the Town of Holderness, New Hampshire.

# 1.2 Purpose

The Problem—Both the present and future change in the land development pattern of Holderness and vicinity will take place through the subdivision of land. Whether this subdivision will be an asset or liability to the municipality in which it is located may well depend upon the existence or absence of land subdivision regulations and their enforcement.

The Purpose of these regulations shall be to promote the development of an economically sound and stable community, affording the best practical living conditions by preventing poorly designed and inadequate subdivisions, as would involve danger of injury to health, safety and prosperity by reason of inadequate provisions for drainage, safe sewage disposal, safe water supply, and safe and convenient transportation. The net results of such undesirable developments could be pollution of our land and waters, excessive and added expenditures through higher taxes in order to pay for the mistakes or shortcomings of the uninformed or unscrupulous subdivider.

A municipality should be concerned with the layout and construction of its streets and roads. Once land is subdivided into lots, and roads are laid out, the pattern is difficult and expensive to change. This pattern has a definite bearing upon how efficient and costly it would be for a municipality to provide services to the area, such as safety services, road maintenance, and snow removal.

An eye to the future, promoting attractiveness and conservation through provisions for parks, playgrounds and other recreation areas, preservation of woodlands and natural or historic features, will make Holderness a desirable place in which to live.

These subdivision regulations will serve as a guide or blueprint for securing equitable handling of all subdivision plans, by providing uniform procedures and standards for observance both of the subdivider and the planning board.

7/25/2003

#### SECTION II TITLE

These regulations shall be known and cited as Subdivision Regulations of the Town of Holderness, hereafter referred to in this text as "these regulations".

#### SECTION III ADMINISTRATION

#### 3.1 Enforcement

The enforcement of these regulations shall be in accordance with N.H. RSA 674:35-674:42, 675:8, 676:4, 16, 17 & 18-I.

# 3.2 Penalties

Penalties for Transferring Lots in Unapproved Subdivision: Any owner or agent of any land located within a subdivision in Holderness that has adopted subdivision regulations, who transfers or sells any land, before a plat of the said subdivision has been approved by the Planning Board and recorded or filed in the office of Grafton County Register of Deeds shall forfeit and pay to the Town of Holderness a penalty of Five Hundred Dollars for each lot or parcel so transferred to sold, and the description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring shall not exempt the transaction from such penalties (RSA. 676:16)

Said municipality may enjoin such transfer or sale and may recover the said penalty by civil action. In any such action the prevailing party may recover reasonable costs and attorney fees as may be ordered by the court.

# 3.3 Waiver

A subdivision plan, substantially in conformity with these regulations and not in conflict with the Holderness Zoning Ordinance, may be approved by the Board, provided that the spirit of these regulations and public convenience and welfare will not be adversely affected. On-site water and sewage disposal must meet requirements noted in Section 6.18. See other exceptions, Section 6.13.

## 3.4 Conflict With Other Regulations

Where both State and local regulations are applicable, the more stringent regulations shall take effect. If the State regulation addresses an issue not included in the local regulation, the State regulation will apply. If the local regulation addresses an issue not included in the State regulation, the local regulation will apply.

#### 3.5 Validity

If any section, subsection, paragraph, sentence, clause, provision, word or phrase of these regulations shall be held to be invalid or unconstitutional by any court or competent authority, such holding shall not affect, impair, invalidate any other section, subsection, paragraph, sentence, clause, provision, word or phrase of this ordinance.

## 3.6 Adoption

These regulations shall pertain to all land within the boundaries of the Town of Holderness, and shall become effective after a public hearing in accordance with N.H. RSA Chapter 675:7 has been held, and after having been passed by vote of a majority of the Holderness Planning board present and voting.

## 3.7 <u>Amendments</u>

These Regulations may be amended in whole or in part or rescinded by the Board, only following a public hearing on the proposed change. The Chairman or Secretary of the Board shall transmit a record of any changes so authorized to he Grafton County Register of Deeds, N.H. RSA 675:6.

#### SECTION IV DEFINITIONS

#### 4.1 Abutter::

Means any person whose property adjoins or is directly across the street or stream from the land under consideration by the local land use board. For purposes of receiving testimony only, and not for purposes of notification, the term abutter shall include any person who is able to demonstrate that his land will be directly affected by the proposal under consideration. For purposes of receipt of notification by a municipality of a local land use board hearing, in the case of an abutting property being under condominium or other collective form of ownership, the term abutter means the officers of the collective or association, as defined in RSA 356-B:3, XXIII.

## 4.2 Agriculture:

The art or science of cultivating the ground, the production of crops, and/or the raising of livestock on a farm (a tract of land used for agriculture.

#### 4.3 Board:

Means the Planning Board of the Town of Holderness.

# 4.4 <u>Community Wastewater System:</u>

A non-municipal wastewater collection, treatment and disposal system for serving at least fifteen (15) service connections or a daily average of at least twenty-five (25) individuals.

# 4.5 <u>Community Water Supply:</u>

A non-municipal water supply system for serving at least fifteen (15) service connections or a daily average of at least twenty-five (25) individuals.

# 4.6 <u>Driveway:</u>

The access for not more than two adjacent lots.

## 4.7 Easement:

A grant or reservation of land for use by others, which may include the public, for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement. The usage of the word "easement" for land platting purposes in these regulations means that such easement area is included within the dimensions and areas of the lots or parcels through which the easement may run, and is not to be separated therefrom as in the case of a right-of-away.

#### 4.8 Engineer or Surveyor:

A person licensed by the State of New Hampshire as a Civil Engineer or Land Surveyor.

# 4.9 <u>Family:</u>

A group of person related by blood or marriage or a group of not more than four persons not related by blood or marriage.

#### 4.10 Immediate:

Within a period of one year.

# 4.11 <u>Lake Shore Area;</u>

Any area within 500 feet of the average high water level of lake or pond; an area to be determined by projecting a line perpendicular to the average high water level of a lake or pond.

#### 4.12 Lot:

A parcel of land capable of being occupied by one principal structure or use, and its accessory structures or uses for one particular purpose as shown and identified as such on a plat. The number of lots in a subdivision will be considered to be the total number on adjacent land with the same subdivider, whether the subdivision is made at one time or serially, it so directed by the Planning Board.

# 4.13 <u>Municipal Wastewater System:</u>

A wastewater collection, treatment and disposal system that serves at least two homes and that is owned and operated by a municipal or regional government.

# 4.14 <u>Municipal Water Supply:</u>

A water supply system for serving at least fifteen (15) service connections or a daily average of at least twenty-five (25) individuals and operated by a municipal or regional government.

#### 4.15 Occasional:

Not more often than once a year.

#### 4.16 Plat:

Means final map, drawing or chart on which the subdivider's plan of subdivision meeting all pertinent Town of Holderness and State of New Hampshire requirements is presented to the Holderness Planning Board for approval, and which, if approved, will be submitted to the Grafton County register of Deeds for recording.

## 4.17 Private Street or Way:

A strip of land used as access to three or more lots or parcels of land.

#### 4.18 Recreational Camping Park:

Shall mean a plot of ground upon which two or more temporary living quarters, such as: travel trailers, tent campers, tents, pickup campers, or similar types of vehicles or structure used for these purposes are located, established or maintained, and operated as temporary living quarters for children or adults for recreation (including education or vacation purposes) either free or by payment of a fee. Occupancy of a recreational site shall not fulfill residency requirements for the Town of Holderness, N.N.

#### 4.19 Temporary:

Shall mean that which does not occupy a recreational site or sites in recreational camping areas in the Town of Holderness for more than 150 days in a 365 day period.

# 4.20 Right-of-Way:

Shall mean a strip of land for or intended to be used for a street, either public or private. Any right-of-way shall be minimum of 50 feet.

## 4.21 Road Agent:

Means the duly designated road agent of the Town of Holderness.

## 4.22 Roadway:

The finished road surface between the shoulder breaks.

#### 4.23 Setback:

Means the distance between a legal boundary (right-of-way, lot line, or property line) and any part of a building, and/or structure.

# 4.24 <u>Slope:</u>

The average steepness of the land surface under consideration expressed in percent of slope. For the purpose of determining lot size, slope shall be determined by slope factors used by the National Cooperative Soil Survey Classification.

# 4.25 Soil Type:

As defined and classified by "Key to Soil Types". High Intensity Soil Maps for NH SSSNNE Special Publication NO. 1, as amended.

## 4.26 Soil Scientist:

A person who is recognized by the Grafton County Conservation District or other qualified individuals accepted by the Holderness Planning Board to make soil type determinations.

# 4.27 <u>Street:</u>

Means and includes highways, as defined in RSA 229:5.

## 4.28 Subdivider:

The registered owner or the authorized agent of the registered owner of a subdivision.

## 4.29 Subdivision:

Means the division of a lot, tract or parcel of land into two or more lots, plats, sites or other divisions of land for the purpose, whether immediate or future, of sale, rent, lease, condominium conveyance or building development. It includes resubdivision and when appropriate to the context, relates to the process of subdividing or to the land or territory subdivided. The division of a parcel of land held in common and subsequently divided into parts among the several owners shall be deemed a subdivision.

#### 4.30 Wetlands:

Land containing soils classified by the National Cooperative Soil Survey as poorly drained, very poorly drained, including fresh water marshes and alluvial soils.

## 4.31 Wildlife Land:

That used as a sanctuary or place of refuge for wildlife.

### SECTION V PROCEDURE

## 5.1 Pre-Application

A subdivider may meet with the Board for a pre-application review of his/her proposed project in one or both of the following two ways:

A) He/she may request preliminary conceptual consultation. Such a consultation shall be limited to a description of the proposed subdivision and possibly a sketch plan and shall be directed at review of the basic concept of the proposal and suggestions which might be of assistance in resolving problems with meeting requirements during final consideration. Such consultation shall not bind either the applicant or the Board that statements made by Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken. The Board and the applicant may discuss proposals in conceptual form only and in general terms such as desirability or types of development and proposals under the master plan. Such discussion may occur without the necessity of giving formal public notice as required under Section 5.10, but such discussion may occur only at formal meetings of the Board.

- B) <u>Design Review Phase</u> The Board or its designee may engage in non-binding discussions with applicant beyond conceptual and general discussions which involve more specific design and engineering details; provided, however, that the design-review phase may proceed only after identification of and notification to abutters and the general public as required by Section 5.10. Statements made by Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken.
- C) A subdivider may elect to engage in either or both phases of a preapplication review as provided in sub paragraphs (A) or (B) or may go directly to formal application as provided in Section 5.8. Pre-application review shall be separate and apart from formal consideration under Section 5.9 and the time limits for application is submitted under that paragraph.

# 5.2 Application

Whenever any subdivision is proposed, the subdivider shall complete the checklist, the application form and submit them to the Planning Board with the necessary fees. Not less that 20 days before any regular meeting of the board. (5.14)

Submission of the application shall constitute an agreement by the applicant or his duly authorized representative that the Planning Board, or any persons designated or delegated by it, may enter upon the property which is the subject of the subdivision application for the purposes of conducting studies, research, or review of any kind. Such entry may be made without notice to the applicant. Any investigations which require major excavation or the disturbance of the land will be done only with the permission of the applicant.

## 5.3 Preliminary Plan

The preliminary plan, taking into consideration the general requirements listed in Section VI, and as described in Section VII, shall be filed with the Board. The Board will then study the preliminary street and lot layout and proposed improvements in connection with the Holderness Master Plan, the Official Town Maps, the needs of the surrounding area and neighborhood, the topography and soil conditions of the area, and any pertinent state of local regulations.

# 5.4 <u>Revision of Preliminary Plan</u>

The Board, before taking formal action, shall hold a discussion with the subdivider, and may hear and confer with other parties whose interest may be affected by the proposed plan.

After such discussion, the Board shall communicate in writing to the subdivider the specific changes, if any, which it will require in the preliminary plan and the types and amount of construction or improvements (Section VII) it shall require as a condition precedent to the approval of the subdivision plan. The Board may disapprove the preliminary layout in its entirety, but shall state its reasons for such disapproval. Any approval shall be considered as tentative and shall not be entered on the plan. If the preliminary plan shows developments by sections, the final plan may be one of the sections.

#### 5.5 Abandonment

A preliminary plan shall be considered to have been abandoned by the developer if he has not submitted a final plan for all or a portion of such subdivision within one year from the date of submission of the preliminary plan. The developer may be granted an extension of this time by the Board upon written application and for reasons deemed adequate by the Board. An abandoned plan cannot be renewed but shall require a complete new submission for further consideration by the Board.

## 5.6 Final Plat

The subdivider, after official notification by the Board with respect to the preliminary plan and the changes, if any, to be made therein, shall, within one year thereafter file with the Board the final plat as described in Section IX, together with other required information as listed in Section VI & VII.

# 5.7 <u>Completed Application</u>

The following requirements shall constitute a Completed Subdivision Application sufficient to invoke Planning Board jurisdiction and to obtain Board approval or disapproval all on a form to be obtained from the Planning Board.

- 1. A) Names and addresses of the subdivider(s)
  - B) Names and addresses of the subdivider (s), agents, surveyors, engineers, soil scientists and attorneys.
    - C) Title of the proposed plan as it appears thereon and the name of the preparer and date.
    - D) Location of the property as depicted on the plan and tax map identification numbers.
    - E) List of all abutters to the property as indicated in town records not more than five (5) days before the day of filing the application with the Board.

7/25/2003

- F) Original signature (s) of the subdividers (s) and its (their) agent (s). If the subdivider is a corporation, the application shall be accompanied by a certified copy of a resolution of its board of directors authorizing the signature (s) of the signatories.
- 2. A check to cover all costs pertaining to a Subdivision and the approval of same as provided in Section 5.14.
- 3. Four (4) copies of a preliminary layout showing or accompanied by information as specified in Section 5.3 and Section VIII.
- 4. Four (4) copies of the Final Plat completed in accordance with Section 5.6 and Section IX hereof.

# 5.8 Filing and Submission of Completed Application

- 1. The Completed Application shall be filed with the Secretary or the Chairman of the Board at least 15 days prior to a scheduled public meeting of the Board
- 2. The Completed Application shall be formally submitted to and accepted by the Board only at such scheduled public meeting after due notification to applicant, abutters and the general public of the date the Completed Application will be submitted and received by the Board in accordance with Section 5.10 hereof.
- 3. An incomplete Application filed by the Applicant will not be formally accepted by the Board nor will notices of a public meeting be mailed, posted or published as provided under Section 5.10 hereof.
- 4. Applications may be disapproved by the Board without public hearing on grounds of: Failure of the Applicant to supply information required by these Regulations, including (1) abutters identification: information required for Preliminary Layout and information required for Final Plan; (2) failure to pay costs of notices or other costs and fees required by these Regulations and (3) failure to meet any reasonable deadline established by these Regulations.
- 5. In case of disapproval of any Application submitted to the Board, the grounds for such disapproval shall be stated in the Minutes or records of the Board.

#### 5.9 Board Action on Completed Application

The Board shall begin formal consideration of the Completed Application within thirty (30) days of its submission and acceptance and shall act to approve or disapprove within ninety (90) days after submission, subject to extension or waiver as provided in accordance with NH RSA 676:4, as amended.

Approval of the final plan shall be certified by written endorsement on the Final Plan and signed by the Chairman, Vice Chairman, Secretary or acting Secretary of the Board, two signatures of the above are required. The subdivider shall be responsible for the payment of the recording fees and all associated costs.

The Planning Board shall be responsible for the recording of the approved and endorsed final plat in the Grafton County Registry of Deeds prior to disposition. Two copies endorsed in writing thereon, shall be retained by the Board and two copies, like wise, with approval and endorsement shall be given to the subdivider.

In case of disapproval of any plat submitted, the grounds for such disapproval shall be adequately stated in the records of the Planning Board and notice given to the subdivider.

# 5.10 Public Hearing

The Board, before considering or taking formal action upon a plat or the Completed Application, shall hold a public hearing, as required by the provisions of RSA 676:4 to provide an opportunity for public testimony relative to the consequences of the proposed subdivision.

At the hearing, the applicant, any abutter or any person with a direct interest in the matter may testify in person or in writing. Other persons may testify subject to Board approval at the hearing.

The applicant and all abutters shall be notified of the hearing by certified mail, return receipt requested, stating the time and place of such hearing, and a general description of the subdivision proposal and its location, at least ten (10) days before the date fixed for the hearing.

Hearing notice to the general public shall also be given at the same time by posting in two public places in the town and by publication in a newspaper of general circulation therein. For any public hearing on the Application, the same notice as required for notice of submission of the application shall be given. If the notice of public hearing has been included in the notice of submission or any prior notice, additional notice of the public hearing is not required, nor shall additional notice be required of an adjourned session of a hearing with proper notice if the date, time and place of the adjourned session was made known at the prior hearing.

#### 5.11 Surety Requirements or Bond

Before approval of a subdivision by the Board, the subdivider shall file a bond or other security in an amount satisfactory to the Board, providing for and securing to the town the actual construction and installation of streets, and such improvements and utilities, if available, and completion of essential drainage, within a period specified by the Board, and expressed in the bond, or other evidence supporting an

7/25/2003

assessment or other method where the town is put in an assured position to do said work and make said alterations at the cost of the subdivider.

Such bond or other method shall be approved as to form and sureties by the Board and/or legal counsel of the town and conditioned on the completion of such improvements within five (5) years of the date of the bond or acceptance by him or any other approved method.

As phases or portions of the secured improvements or installations are completed and approved by the Planning Board or its designee, the municipality shall partially release said security to the extent reasonably calculated to reflect the value of such completed improvements or installations. Cost escalation factors not to exceed 10% per year may be applied by the Board. (RSA 674:36, III (b). Upon release of these performance bonds, a maintenance bond may be required. Such maintenance bond may be released after a one (1) year period.

#### 5.12 Failure to Take Action

Upon failure of the Board to approve or disapprove the application in accordance with N.H. RSA 676:4, the applicant may obtain from the Selectmen an order directing the Board to act within 15 days. Failure of the Planning Board to act upon such order of the Selectmen or City Council shall constitute grounds for the superior court, upon petition of the applicant, to issue an order approving the application, if the court determines that the proposal complies with existing subdivision regulations and zoning and other ordinances. If the court determines that failure to act within the time specified was the fault of the Planning Board and was not justified, the court may order the Planning Board to pay the applicant's reasonable costs, including attorney's fees, incurred in securing such order.

# 5.13 Approval of Plats of Exempted Subdivisions

Where the approval of the Board is a necessary prerequisite for the recording of any plat exempted from these regulations such as, minor lot line adjustment or boundary agreements any two of the following are empowered to make such approval the Chairman, Vice Chairman, Secretary or acting Secretary of the Board.

#### 5.14 Costs

All costs pertaining to the subdivision and the approval of same and the recording thereof, shall be borne by the subdivider prior to the Board's approval.

Application for subdivision approval shall be accompanied by a preliminary filing fee of twenty-five dollars (\$25.00) along with a fee of seventy-five dollars (\$75.00) for each lot filed with the Secretary of the Board. The Secretary shall furnish the applicant with a receipt for same.

7/25/2003

The Board may require special investigative studies by a qualified engineer for the purpose of reviewing a subdivision plan, including drainage and erosion control, sewage disposal system, water facilities and road construction. The Board may also require other assistance for special investigative studies such as, environmental, economic or traffic impact studies, review of documents or other matters requiring professional assistance in relation to a particular subdivision. The cost of the assistance to the Board, as well as the cost of engineering studies noted above, shall be the responsibility of the applicant.

#### SECTION VI GENERAL REQUIREMENTS FOR THE SUBDIVISION OF LAND

The subdivision shall observe the following requirements and principles of land subdivision:

6.1 The plan shall conform with the Holderness Zoning Ordinance and Master Plan, the official Town maps, and any other pertinent state or local laws or regulations.

## 6.2 <u>Unsafe Land:</u>

Land of such character that, in the opinion of the Board, cannot be safely used or maintained for building purposes because of danger to health or peril from fire, flood, erosive action, unstablized slope, or fill or other menace, shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, life or property, or aggravate the flood hazard, until or unless appropriate measures can and have been taken by the subdivider to eliminate such hazards. No natural floodway shall be obstructed.

## 6.3 Pemi River Corridor Overlay District

Adopted in 1987. The purpose of this district is to provide protection for the environmentally sensitive corridor along the Pemigewasset River and also protection for lives and property from flood waters and debris. The restrictions contained herein take precedence over permitted uses in the portion of the districts over which it lies. Lot size shall be a 2 acre minimum. The minimum lot frontage on the Pemigewasset River shall be 200 feet for the first dwelling unit, with 20 additional feet needed for each additional dwelling unit.

#### 6.4 Special Flood Hazard Areas

A. All subdivision proposals and proposals for other development governed by these Regulations having lands identified as Special Flood Hazard Areas in the "Flood Insurance Study for the Town of Holderness, N.H.", together with the current Associated Flood Insurance Rate Maps and Flood Boundary and Floodway Maps of the Town of Holderness shall meet the Following.

- B. All subdivision proposals and other proposed new development shall be reviewed to determine whether such proposals will be reasonably safe from flooding. Subdivision review shall assure that the following minimum standards are met:
  - a) The proposal is designed consistent with the need to minimize flood damage.
  - b) All public utilities and facilities, such as sewer, gas, electrical and water systems shall be located and constructed to minimize or eliminate flood damage.
  - c) Adequate drainage systems shall be provided to reduce exposure to flood hazards.
  - d) Base flood elevation (the level of the 100 year flood) data shall be provided for any proposal when in a flood-hazard area as defined in para. 6.4A.
- C. Require new or replacement water supply systems and/or sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and require on-site waste disposal systems to be located so as to avoid impairment of them or contamination from them during flooding.

#### 6.5 Unsuitable Land:

The Board shall restrict subdivision of land which is found by the Board to be unsuitable for development by reason of high water table, slope in excess of 25%, bedrock or other impervious strata close to the surface or excessive slope.

#### 6.6 Part of a Lot:

The Board may permit, as to unsafe and unsuitable land, that it be platted as part of a lot in which there is sufficient safe and suitable land to satisfy the requirements of these regulations as to minimum lot size.

#### 6.7 Lot Area:

In order to protect the town against the danger to health, safety and prosperity occasioned by the lack of municipal water and sewer and to prevent the excessive expenditure of public funds for the supply of such services, minimum lot sizes within all subdivisions shall, in addition to meeting the requirements of the Zoning Ordinance for the district wherein the subdivision is proposed, also meet the lot size

requirements specified in Table 1 "Minimum Lot Size by Soil Classification." Where the minimum lot size in the Zoning Ordinance differs from those in Table 1, the most stringent shall apply.

This requirement is subject to the following qualifications:

- A. Where more than one soil type is found on a lot, a weighted average of those soils occurring on the lot shall be used to determine the minimum lot size.
- B. Where cluster or multiple family type dwellings are utilized, the minimum lot size shall be determined by using the per lot requirements of the soils and slopes tables multiplied by the number of lots or family units planned. The adjacent and surrounding land not utilized for such structure or structures shall be left open land and must be so restricted and so recorded in the deed so as to prevent the land being utilized for building purposes of any nature at any future time. It is suggested that such open land become the property of and be cared for by the cluster of multiple family community or development owner or owners.
- C. Wetlands may not be used to fulfill any part of the minimum lot size.
- D. In subdivision where a community water supply or community wastewater system is to be provided, minimum lot sizes may be reduced by 33 1/3% of the minimum requirements as stated in Table 1, but no instance less then 43,560 square feet.
- E. Lake shore areas: In lake shore areas, minimum lot sizes for each soil type shall be increased by 33 1/3% of the minimum requirements as stated in Table 1.
- F. Minimum lot sizes for residential developments with greater than four (4) bedrooms per unit and for commercial and industrial development shall be determined as follows:
  - 1. For residential use with 5 or more bedrooms per unit, the minimum lot size shall be proportionately larger than the lot size indicated in Table 1 as determined by the formula:

```
Lot size = \underline{\text{no. of bedrooms}} X (lot size from Table 1) (sq. ft.)
```

2. For commercial and industrial uses, the lot sizes will be determined by the formula:

```
Lot size = gal. of wastewater/day X (lot size) + (land required for (sq. ft.) 2000 (GPD) (from Table 1) for well radius)
```

gallons of wastewater discharged per day shall be determined from NH code of administrative rules, par W, L007.02 (B), "unit design flow

#### figures."

- G. Septic systems are not permitted on poorly or very poorly drained sails.
- H. The total area required for the minimum lot size shall be naturally contiguous.

## 6.8 <u>Determination of Soil Type</u>

- (a) Tests and soil mapping for determining soil information for use in this section shall be performed by a qualified individual as designated in 4.26 using standards from "High Intensity Soil Maps for NH", SSSNNE Special Publication No. 1 amended
- (b) Soil data using the standards of high intensity soil maps for New Hampshire shall be provided as a part of the subdivision plan at the scale and dimensions required and signed by the qualified individual as designated in 4.26. Any cover letters or explanatory data provided by the qualified individual as designated in 4.26 shall also be submitted, including a tabulation of the square footage of each soil type found in each lot.
- © Such test shall be performed with the advice and under the direction of the Planning Board or its designated agent.
- (d) All costs of performing such investigations shall be borne by the subdivider.
- 6.9 All lots shall be laid out so that, in the opinion of the Board, they shall provide proper sites for building development in accordance with RSA 674:36. There shall be adequate width and area on every lot after the erection of a residence, to permit parking within the lot of at least two (2) cars for each family dwelling unit. Provision shall be made for off-street parking at multiple dwelling structures (and cluster type dwellings) for at least two cars for each dwelling unit therein.

#### 6.10 Frontage:

When one boundary of a lot is the shore of a lake of pond, or the shore or bed of any stream, the minimum frontage on the water shall not be less than 200 feet. Each lot shall have a frontage on a street of not less than 150 feet.

For subdivisions with water access for back lots, the following requirements shall be met:

- a) 200' minimum shore frontage provided for 1 to 10 dwelling units or recreational sites;
- b) 20' shore frontage for each additional dwelling unit or recreational site;

- c) minimum depth shall be  $\frac{1}{2}$  (one half) of the frontage.
- d) if automobile transportation is to be utilized, the parking area shall be provided on the basis of 200 square feet for each dwelling unit granted use of access. The parking area shall not be nearer than 100 feet from the high water line. Parking shall only occur in the designated parking area.

## 6.11 Shape of Lot:

Where there is no municipal water supply or sewage disposal system, shape of lots shall be such that it is possible to meet state and local requirements that all parts of a septic system shall be not less than 125' from on-site water supply, water supply of adjoining property or high water line of any lake, pond or stream bed, wetland or any body of water, natural or artificial.

# 6.12 Building Lines

- A. No building shall be constructed or placed on any lot within 35 feet from the right-of-way of any street or within 35 feet from the lot side (exception 6.12B) or back lines. Provision for maintaining such building lines shall be established by covenants in deeds of the lot.
- B. Clear sight triangles of at least twenty-five feet (25') measured along street lot lines from their point of junction shall be provided at all intersections and no building shall be permitted within such sight triangles (at least 25 feet from each street on corner lots).
- C. Shrubberies, trees or other sight obstructions at street corners shall not interfere with the clear sight triangle.

## 6.13 Waiver

- A. The Board may permit the utilization of lots for residences with areas less than one acre per family, less than 200 foot water frontage and less than 150 foot frontage on a street, the deeds of which were recorded previous to December 21, 1970, with the Grafton County Register of Deeds, providing that said recorded lot was approved for on-site sewage system by the N.H. Water Supply and Pollution Control Commission and meets the state's requirements for on-site water supply, where no municipal sewage disposal system and/or water supply exists and where adequate drainage can be held without diversion of water into adjoining properties.
- B. <u>Waiver of Certain Requirements Relative to Approval and Endorsement of Filing of Plats:</u> Where the subdivision consists of the division of a lot, tract, parcel or area of land into not more than three lots, and where no other immediate division

7/25/2003

or development of either the original tract or the subdivision in question is contemplated, and when no new street, road or extension of a street or road or municipal utilities (if available) are required, the Board may, at its discretion, in lieu of a preliminary plan, revised preliminary plan and final plan, permit the filing of a plat with sketch to be presented as the only, as well as the final, plat for its approval and, providing that, in the opinion of the Board, the General Requirements in Section VI have been fulfilled and/or are not applicable and providing that the final plat also contains the information pertinent and applicable as stipulated in Section VII and Section IX.

A notice shall be given as per Section 5.10. A public hearing shall be held if requested by an abutter or required by the Board.

Surety requirements or Bond, Section 5.11 may be eliminated at the discretion of the Board.

Approval and endorsement, as a required prerequisite for recording of plat and deed (as a matter of expediency), may be made by the Chairman and Secretary of the Board only or by the entire Board.

The Planning Board shall be responsible for the recording of the approved and endorsed final plat in the Grafton County Registry of Deeds prior to disposition. Two copies endorsed in writing thereon shall be retained by the Board and two copies, likewise, with approval and endorsement, shall be given to the subdivider.

The application fee in such an instance of a single plat when no hearing is to be held, will be \$10.00 per lot or if public hearing is required there will be a fee of \$25.00 filing fee and \$10.00 per lot. At the applicants expense.

Certificate of failure to take action applies to this waiver (5.12).

- C. Waiver of Road Construction and Road Width for Driveways Serving Not More than Two Lots: The following exceptions and provisions stated herein may be granted on application for certain subdivisions where a driveway is to serve no more that two lots, provided that, in the opinion of the Planning Board, the spirit of these Subdivision Regulations, public convenience, economy and welfare will not be adversely affected.
  - 1) The driveway serving not more than two adjacent lots may be an easement of not less than 50 feet in width and the traveled way may be required to conform to these Subdivision Regulations as to roadway width and construction (except that the provisions of 6.12, 6.19B thru 6.19E and 7.2 thru 7.5 of these regulations may be waived). There shall be no release from any other regulations.

- 2) Such a driveway may not become a town road except by complying with the regulations for town roads in effect at the time and acceptance in accordance with statute.
- 3) The deeds to the two lots served shall reflect the fact that a driveway is shared by means of easement and that road construction, repair, maintenance and plowing of snow shall be the responsibility of the lot owners.
- 4) Such a roadway shall conform to the terrain but shall have a maximum grade of 12% except that the maximum grade within 50 feet of the intersections with town roads and cul-de-sacs shall be 3%.
- 5) If, in the opinion of the Board, and after consultation with the town road agent, it appears that the topography and/or soil conditions of the right-of-way are likely to cause or do cause water drainage onto neighboring properties, into any body of water or onto a public street, corrective measure shall be required and shall be completed before the subdivision is approved.
- D. <u>Adjoining Properties:</u> The sale or exchange of parcels of land between owners of adjoining properties for the express purpose of adjusting boundaries, providing that no additional lots are created, and the original parcels are not reduced below the minimum size required by these regulations, are exempted from the requirements of Section VI and Section 7.2.

# 6.14 Grading and Drainage

Lots shall be laid out in relation to the topography and graded sufficiently to provide adequate drainage, eliminating flood or stagnant water pools, without diversion of water onto other lots or onto property adjoining the subdivision. Lots, where feasible, shall be graded toward the street. No water shall be permitted to run across the street on the surface but shall be directed into catch basins and piped underground in a pipe or culvert of not less than 18 inches in diameter or of such size as may be deemed necessary by the Board. Provisions should be made to effectively accommodate any increased runoff caused by changed soil and surface conditions during and after development. Where feasible, natural vegetation should be retained and protected.

#### 6.15 Easements

Where the topography is such as to make difficult the inclusion of any utilities, drainage or other special purposes for services to public area as laid out, the preliminary plan shall show the boundaries of proposed permanent easements over or under private property. Such easements shall be not less than 20 feet in width and shall have satisfactory access to existing or proposed public ways. Watercourses proposed for public control shall have a permanent easement of not less than 20 feet

#### 6.16 Recreation Areas

Areas set aside for parks and playgrounds to be dedicated or to be reserved for the common use of all property owners by covenant in the deed, whether or not required by the Board, shall be of reasonable size and character for neighborhood playgrounds or other recreational use. For subdivisions involving more than 25 acres, whether done at one time or in a series, at least 5% of the area shall be reserved for recreational purposes.

# 6.17 Reserve Strips

Reserve strips of land, which in the opinion of the Board, show an intent on the part of the subdivider to control access to land dedicated to public use or access to backland not yet developed, shall not be permitted.

## 6.18 Sewage Disposal and Water Supply

- A. Unless public sewage and water facilities are provided, it shall be the responsibility of the subdivider to provide adequate information to prove that the area of each lot is adequate to permit the installation and operation of both on-site water and sewage systems. Each water system shall be at least 125 feet (see RSA 147:2) from any portion of a septic system on its own or adjoining lots. Construction of such water system shall be in accordance with U.S. Dept. of Health, Education & Welfare Service Publication titled: "Manual of Individual Water Supply System, P.H. Service Pub. #24" is advocated, a copy of which is on file with the Board.
- B. In areas not currently served by public sewer systems, it shall be the responsibility of the subdivider to provide adequate information to prove that the area of each lot is adequate to permit the installation and operation of an individual sewage disposal system, septic tank and drainage fields. Such information shall consist of a report showing the results of a series of percolation test, taken one to the acre or lot in the subdivision at the Board's discretion. Each sewage disposal system shall be constructed to conform with specifications set forth in the N.H. Water Supply & Pollution Control Commission publication "The Septic Tank System of Sewage Disposal", three copies of which are on file with the Secretary and Chairman of the Board. A written report from the WSPCC, stating that their approval for the installation and operation of individual sewage disposal system on the lot in question will serve to satisfy the Board's requirement, unless otherwise stated in these regulations (see also RSA 149-E)
- C. <u>Community Water Supply and Sewage Disposal Systems:</u> The design of any community water supply or sewage system, to be provided by the subdivider, shall be approved by the appropriate officials of the State of N.H. before the Board will approve the subdivision. It shall be the responsibility of the subdivider to furnish proof in writing to the Board that such requirements have been fulfilled.

D. Operation and Maintenance of Facilities: The Board will approve no subdivision with a community water supply or sewage disposal system, subject to control by the State of New Hampshire, until provision satisfactory to the State is made for the continued operation and maintenance of such systems. The Board encourages and may require the subdivider to establish a community association to provided continued maintenance of such community utilities, streets, parks, playground and beaches as may not be dedicated to public use and accepted by the town and, if required by the Board, it shall be clearly stated in the deeds that such community or precinct installation, maintenance, etc. is in effect.

## 6.19 Streets

- A. <u>Arrangement:</u> Streets shall be logically related to the topography so as to provide suitable lots, reasonable grades and safe intersections in appropriate relationship to the proposed use of the land. The arrangement of streets in the subdivision shall provide for the continuation of the principal streets in the adjoining subdivisions or for their proper projection when adjoining property is not subdivided.
- B. Width: Streets shall be of a width at least as great as that of such existing or continuing streets, except that no street or highway right-of-way shall be less than 50 feet, and may be more, whether the street be new or existing, if warranted, in the opinion of the Board. Example: a street likely to become a main highway in the near future, or in order to conform with official maps or other pertinent state or local laws as may be adopted.
- C. <u>Intersections</u>: Streets should be laid out to intersect as nearly as possible at right angles and no angle of intersection of less than 60 degrees shall be permitted. Streets entering opposite sides of another street shall be laid out either directly opposite one another, or with a minimum offset of 125 feet between their center lines. Intersecting property lines at street intersections shall be joined by a curve of at least 25 feet radius.
- D. <u>Roadway:</u> or traveled way, exclusive of grass strips and sidewalk areas, shall have a width of at least 20 feet.
  - In subdivisions where an existing or proposed road is to serve not more than eight (8) lots and where the road is to remain as a private way, the Board may waive surface treatment as specified in Section 7.2C7 and may allow a minimum roadway width of 18 feet. However, where slopes exceed 7% full compliance with road construction, requirements will be necessary for that portion of the road.
- E. <u>Grades:</u> of all streets shall conform in general to the terrain and shall have a maximum grade of 10% except that the maximum grade within 50 feet of

- intersections and cul-de-sacs shall be 3%. Where unusual topographical conditions exist the Board may permit a short length of grade up to 12%.
- F. <u>Horizontal Curves:</u> shall have a center line radius of not less than 150 feet, except turnarounds on dead-end streets. For changes in grade exceeding one percent, a vertical curve shall be provided, insuring a minimum sight of one hundred and fifty feet.
- G. <u>Dead-End Streets</u>: Dead-end streets shall be provided with a turnaround roadway having a minimum radius of 60' from the center to the inside edge of the 50' right-of-way. The final plat shall state that no structure may be built within the turnaround area unless the area is sufficient to meet the requirements of being a lot.
- H. <u>Street Names:</u> Streets which join or are in alignment with streets of abutting or neighboring properties shall bear the same name. Names of new streets shall not duplicate nor bear phonetic resemblance to the names of existing streets within the town. Where practical names shall have an historical or topographic connection. All streets shall have permanent name signs installed. These signs must be compatible with existing town street signs.
- I. Width of Blocks: shall not be less than 300 feet and shall not exceed 1200 feet.
- J. <u>Access to Water:</u> All subdivision with frontage on bodies of water shall provide access or a permanent easement of not less than 20 feet of suitable intervals for fire fighting equipment, to said bodies of water.

#### SECTION VII IMPROVEMENT CONSTRUCTION REQUIREMENTS

The following improvements shall be installed and constructed by the subdivider to the satisfaction of the Board, and after consultation with the Selectmen, and under the supervision of the Town Road Agent, the subdivider shall be required to file a bond or make other suitable surety as contained in Section 5.11 prior to approval of the final plat.

#### 7.1 Monuments

Monuments constructed of stone or concrete, at least 4 X 4 inches on the top and at least 35" long, or holes with iron pins drilled in ledge or large boulders, shall be set at all block corners and permanent boundary markers, such as iron pins or equivalent markers at all lot corners.

#### 7.2 All Streets

All work shall be done in conformance with the latest edition of the state of New Hampshire Department of Public Works and Highways standard specifications for road and bridge construction where applicable and any other standards and

specifications as adopted by the Board and the Board of Selectmen, the most stringent requirements shall apply. Additional requirements and specifications may be specified by the Board as the individual subdivision (s) warrant.

- A. Shall have a width in accordance with Section 6.19B.
- B. The roadway or traveled way shall be in accordance with Section 6.19D Exceptions, see 6.13C.
- C. The roadway will be constructed in accordance with the following specifications:
  - 1. Grading: remove all topsoil, stumps, roots and rocks or outcroppings. Ledge shall be removed to a depth of 3' (or more) below the finish grade of the subsurface.
  - 2. Minimum sub-base of 12" bank-run gravel or better material.
  - 3. Minimum base of 3" crushed bank run gravel or better material.

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4. Slopes: in cut - earth 2:1
ledge 1:2
in fill - under 10 ft. 4:1
over 10 ft. 2:1
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All slopes loamed to a minimum depth of 2 inches and seeded, or as an alternative rip-rap may be used.

- 5. Shoulders: (1/2" / ft. pitch) minimum width of 4 ft. each side.
- 6. Drainage swale minimum width of 3 feet and minimum depth of 16 inches except where well drained soils permit and the Planning Board accepts deviation. Stabilization of swale surfaces as dictated by pitch.
- 7. Surface: The road surface shall consist of hot bituminous mix, to be applied in two separate applications, consisting of 1 ½ inches of ¾ inch diameter stone base and 1 inch of ½ inch wearing surface of finish coat. The percentage of liquids will be determined by estimating the weight of vehicles that will use the road.
- 8. All culverts to be minimum of 18" or size deemed reasonable.
- 7.3 All proposed drainage facilities and culverts shall be installed. Erosion shall be controlled by placing mulch or matting on all surfaces disturbed by construction of

- the roadway and on all other surfaces where there is danger of eroded material being carried to the roadway area.
- 7.4 The roadway shall be graded to the final grade in accordance with profile and cross section submitted. They shall be properly crowned and contoured so that no water shall be permitted to collect in stagnant pools or to run across the street on its surface, but it shall be directed into ditches or catch basins and shall be piped underground in a pipe of sufficient size to carry the normal flood flow of water, provided no such pipe or culvert shall be less than 18 inches in diameter or size deemed suitable by the Board. All roadways shall be in the center of the right-of-way.
- 7.5 Any bridge or culvert shall be subject to the approval of the Board, in consultation with Town Road Agent or his designee. The design of said bridge or culvert shall be shown on the preliminary layout.
- 7.6 <u>Approval of Roads Street Parks Playgrounds—etc.</u> by the Planning Board does not signify acceptance by the Town. Acceptance can only be accomplished as per current state statutes

#### SECTION VIII THE PRELIMINARY LAYOUT

Each subdivider shall file with the Board four (4) black and white copies of a preliminary layout of the plans at a horizontal scale of not more than 100 feet to the inch. The material and sheet size shall be consistent with the requirements of the Grafton County Register of Deeds, RSA 478:13A.

A margin of at least one inch shall be provided outside ruled borderlines on three sides and of at least two inches along the left side for binding. Two plans will be retained by the Board and two will be returned to the subdivider with an appropriate approval and endorsement. The preliminary plan shall show, or be accompanied by, the following information.

- 8.1 Proposed subdivision name, name and address of owner of record, subdivider and designer (indicating to who required notice of hearing shall be sent), date, true north and south, tax map number and locus.
- 8.2 Names of owners of record of abutting properties, abutting subdivision names, streets, existing easements, setbacks, alleys, parks and public open spaces, and similar facts regarding abutting property.
- 8.3 Location of property lines and their approximate bearings and dimensions; existing easements, rights-of-way, buildings, water courses, ponds or standing water, rock ledges and other essential features.

- 8.4 Location of existing water mains, sewers, if any, culverts, drains and proposed connections or alternative means of providing water supply and disposal of sewage and surface drainage. Location of each percolation test hole and the percolation results and adequate information with respect to soil conditions to meet the requirements of Section 6.8B; and to show that with the lot size, shape and design as proposed, a water well, if required, and a septic tank, if required, can be put on one lot without contamination of the water supply on such lot or on other property.
- Location, name and widths of existing and proposed streets and driveways, with their approximate grades and profiles, building lines and the elevation of sufficient points on the property at the scale of no smaller than 1" (one inch) to 100 feet (100'). The Planning Board may require a scale of 1" = 50' determined necessary by the Board.
- 8.6 Boundaries and purposes of proposed permanent easements over or under private property, such easements shall have satisfactory access to existing or proposed public ways.
- 8.7 Proposed lots, approximately square foot size of each lot and setback lines.
- 8.8 Location of all parcels of land proposed to be dedicated to public use and the conditions of such dedication; location of all parcels of land proposed for community use and the conditions of such use, and a copy of such deed restrictions as are intended to cover part or all of such parcels.
- 8.9 Preliminary designs of any bridges or culverts which may be required.
- 8.10 Temporary stakes or other markers shall be provided on the property to facilitate inspection.
- 8.11 Where the preliminary layout submitted covers only a part of the subdivider's entire holdings, a sketch of the prospective future street systems of the unsubmitted part will be filed and considered in the light of adjustments and connections with the street system of the part submitted.
- 8.12 Provisions made for erosion and sediment control unless there has been a prior determination by the Board that such plans are not necessary.
- 8.13 Topography of the parcel at a contour interval of 2 feet.
- 8.14 A high intensity soil survey, (HISS) as provided in Section 6.8.

# SECTION IX FINAL PLAT

The final plat submitted for approval and subsequent recording shall be submitted in quadruplicate. The material, size of sheet, margins and scales shall be as required in Section

VIII, Preliminary Layout. Adequate space shall be available on the map for the necessary endorsement of the Board, which wording shall read:

"Approved by the Holderness Planning Board of	n(date) Certified
by Chairman	(name) and
Secretary	(name)."

Two copies of the Approve and Endorsed Final Plat shall be retained by the Board and two copies approved and endorsed shall be given to the subdivider. The subdivider shall be responsible for the payment of the recording fee. The final plat shall show:

Proposed subdivision name or identifying title, the name and address of the owner of record and subdivider, the name, license number and seal of the engineer and/or surveyor, date, scale, tax map number and north point.

- 9.2 Monuments, driveways, street and other right-of-way lines, pedestrian ways, building setback lines, lot lines, lot sizes in square feet, reservation lines, easement lines and areas to be dedicated to public use, areas for community use, and the areas which are reserved by the subdivider.
- 9.3 Typical design and location of any proposed on-lot sewage and water systems and location and size of any proposed storm pipes and catch basins.
- 9.4 Sufficient data to determine readily the location, bearing, length of every street or right-of-way line, lot line, boundary line, easement lines and reservations and to produce such line upon the ground. Designation and area of each lot.
- 9.5 Typical street cross sections and approximate grades, profiles and locations and sizes of any bridges and culverts.
- 9.6 All dimensions shall be shown to the nearest 1/100 of a foot and bearings to the nearest minute
- 9.7 Location and description of each permanent monument.
- 9.8 Other Data. The subdivider shall submit in quadruplicate all drawings and specifications required for the construction of all required improvements, and such assurances and bonds as the Board may require (Section 5.11).

#### **KEY TO SOIL TYPES**

This key is used in determining soil types that are utilized in high intensity soil surveys for administration of lot size by soil type and wetland regulations. The soil types are defined as soils having the same soil characteristics of drainage class, parent material, restrictive features, and slope; and are designated by a five part symbol, the parts being A, B, C, D, E.

#### SYMBOL A - drainage class

- 1 excessively drained
- 2 well drained
- 3 moderately well drained
- 4 somewhat poorly drained
- 5 poorly drained
- 6 very poorly drained
- 7 not determinable (to be used only with Symbol B-6)

## SYMBOL B - parent material

- 1 Glacoifluvial Deposits (outwash/terraces)
- 2 Glacial Till Material

Marine ro Glacoilacustrine deposits

- 3 Very fine sand and silt deposits
- 4 Loamy / sandy over silt / clay deposits
- 5 Silt and clay deposits
- 6 Excavated, regarded or filled
- 7 Alluvial deposits
- 8 Organic Materials Fresh Water
- 9 Organic Materials Tidal Marsh

SYMBOL C - restrictive feature (if more than one applies, list the most restrictive)

- 1 none
- 2 bouldery, with more than 15% of the surface covered with boulders (larger than 12 inches in diameter)
- 3 mineral restrictive layer (s) are present in the soil profile less than 40 inches below the soil surface such as hard pan, platy structure, or clayey texture. For example of soil characteristics that qualify for restrictive layer, see Soil Manual for Site Evaluations in New Hampshire, pages 2-22, figure 2-8.
- 4 bedrock present in soil profile 0 to 40 inches below the soil surface (bedrock is either a lithic or paralithic contact see Soil Taxonomy p. 48-49).
- 5 subject to flooding
- 6 does not meet fill standards (see addendum Standards for Fill Material) (only to be used with symbol B-6).
- X areas where depth to bedrock is so variable that a single soil type cannot be applied will be mapped as a complex of soil types and will have a symbol C of X

SYMBOL D - slope class

B - 0-8%

C - 8-15%

D - 15-25%

E - 25% +

SYMBOL E - high intensity soil map identified - H (see addendum)

TABLE 1 MININUM LOT SIZE BY SOIL TYPE

Soil	Lot	Soil	Lot	Soil	Lot
<u>Type</u>	<u>Size</u>	<u>Type</u>	<u>Size</u>	<u>Type</u>	<u>Size</u>
111BH	43500	212BH	75000	23XCH	100000
111CH	45000	212CH	80000	23XDH	140000
111DH	60000	212DH	95000	23XEH	NA
111EH	NA	212EH	NA	241BH	50000
112BH	75000	213BH	50000	241CH	75000
112CH	80000	213CH	75000	241DH	100000
112DH	95000	213DH	100000	241EH	NA
112EH	NA	213EH	NA	243BH	50000
114*H	NA	214*H	NA	243CH	75000
11XBH	80000	21XBH	80000	243DH	100000
11XCH	100000	21XCH	100000	243EH	NA
11XDH	140000	21XDH	140000	244*H	NA
11XEH	NA	21XEH	NA	24XBH	90000
121BH	43560	221BH	43560	24XCH	130000
121CH	45000	221CH	45000	24XDH	180000
121DH	60000	221DH	60000	24XEH	NA
121EH	NA	221EH	NA	251BH	90000
122BH	75000	222BH	75000	251CH	135000
122CH	80000	222CH	80000	251DH	160000
122DH	95000	222DH	95000	251EH	NA
122EH	NA	222EH	NA	253BH	90000
124*H	NA	223BH	50000	253CH	135000
12XBH	80000	223CH	75000	253DH	160000
12XCH	100000	223DH	100000	253EH	NA
12XDH	140000	223EH	NA	254*H	NA
12XEH	NA	224*H	NA	25XBH	130000

16XDH 150000 233BH 50000 263CH 8	50000 5000 0000 NA
Soil Lot Soil Lot Soil Lo	nt.
	<u>ze</u>
<del></del>	
211CH 45000 233EH NA 264*H	NA
211DH 60000 234*H NA 266*H	NA
	90000
	45000
	90000
	90000
	35000
311BH 60000 341BH 75000 414*H	NA
	50000
	80000
	75000
	15000
	30000
	65000
312EH NA 343EH NA 423BH	90000
313BH 60000 344*H NA 423CH 1.	35000
313CH 90000 34XBH 115000 424*H	NA
	50000
	80000
	15000
31XBH 100000 351BH 90000 431CH 1	50000
31XCH 120000 351CH 135000 433BH 1	15000
31XDH 160000 351DH 160000 433CH 1	50000
31XEH NA 351EH NA 434*H	NA
	75000
	35000
	15000
	50000
	15000
322CH 100000 35XBH 130000 433CH 1	50000

322DH	135000	35XCH	190000	444*H	NA
322EH	NA	35XDH	240000	44XBH	175000
323BH	60000	35XEH	NA	44XCH	235000
323CH	90000	361BH	70000	451BH	135000
323DH	120000	361CH	100000	451CH	205000
323EH	NA	361DH	130000	453BH	135000
324*H	NA	361EH	NA	453CH	205000
32XBH	100000	363BH	70000	454*H	NA
32XCH	120000	363CH	100000	45XBH	195000
32XDH	160000	363DH	130000	45XCH	285000
32XEH	NA	363EH	NA	461BH	105000
331BH	75000	364*H	NA	461CH	150000
331CH	100000	366*H	NA	463BH	105000
Soil	Lot	Soil	Lot	Soil	Lot
<u>Type</u>	<u>Size</u>	<u>Type</u>	<u>Size</u>	<u>Type</u>	<u>Size</u>
331DH	125000	36XBH	110000	463CH	150000
331EH	NA	36XCH	130000	464*H	NA
333BH	75000	36XDH	170000	466*H	NA
333CH	100000	36XEH	NA	46XBH	165000
333DH	125000	375*H	NA	46XCH	195000
333EH	NA	411BH	90000		
334*H	NA	411CH	135000		

- \* Means any slope or any number
- \*\* or \*\*\* means additional on-site needed.

NA means Not Allowed

#### KEY TO SOIL DRAINAGE CLASSES

- A. Soils that have an aquic moisture regime or are artificially drained and;
  - 1. have organic soil materials that extend from the surface to a depth of 16 inches or more; or
  - 2. have a histic epipedon (either mineral or organic); or
  - 3. have an epipedon that has 'n" value of greater than 0.7; are VERY POORLY DRAINED
- B. Soils that have an aguic moisture regime or are artificially drained and
  - 1. have an albic horizon that lies just above a horizon having hue 10YR or redder, value less than 5, chroma less than 4; and have faint to prominent mottles in the albic horizon less than 12 inches below the soil surface; or
  - 2. within 20 inches of the soil surface have textures of dominately very fine sand or finer with distinct or prominent mottles less than 12 inches below the soil surface and have a subsurface horizon less than 20 inches below the soil surface that has dominant color, moist, in the matrix of chroma 2 or less, value 4 or more, or
  - 3. within 20 inches of the soil surface have textures of dominantly loamy fine sand or coarser with distinct or prominent mottles less than 12 inches below the soil surface and have a subsurface horizon less than 20 inches below the soil surface that has dominant color, moist, in the matrix chroma 3 or less, value 4 or more; or
  - 4. have any textures with no mottles and have a subsurface horizon less than 20 inches below the soil surface that has dominant color, moist, in the matrix of chroma 1 or less, value 4 or more; or
  - 5. have a mineral eipiedon greater than 12 inches and less than 20 inches that is underlain with a mottled subsurface horizon less than 20 inches below the soil surface that has dominant color, moist, in the matrix of chroma 2 or less, value 4 or more; are

#### POORLY DRAINED

C. Soils that have distinct or prominent mottles, that are not relic mottles, at a depth less than 15 inches below the soil surface; are

SOMEWHAT POORLY DRAINED

D. Soils that have distinct or prominent mottles, that are not relic mottles, between a depth of 15 inches and 40 inches below the soil surface; are

#### MODERATELY WELL DRAINED

E. Soils that have textures in any horizons between 10 to 40 inches of very fine sand or finer; are

WELL DRAINED

F. All other soils; are

# EXCESSIVELY DRAINED ADDENDUM TO KEY SOIL TYPES

#### 1. Standards for Fill Material:

Fill material consisting of organic materials or non-soil materials such as tree stumps, sawdust, wood chips and bark, birch, asphalt, concrete, metal, wallboard, etc., even with a soil matrix, should not be used.

The in-place fill should have less than 15% organic matter and non-soil materials by volume.

The in-place fill should not contain more that 25% by volume, of cobbles (6 inches diameter) and boulders (larger than 12 inches in diameter).

The in-place fill should not have more than 27% by weight of clay size (0.002mm and smaller) particles.

The fill should be essentially homogeneous. If bedding planes and other discontinuities are present, detailed analysis is necessary.

#### 2. Examples of soils classified using the KEY TO SOIL TYPES:

- a. An excessively drained sand and gravel soil with no restrictive features on a 9% slope would be identified as; 111CH
- b. A moderately well drained glacial till soil with a hardpan on a 4% slope, would be identified as: 323BH
- c. A somewhat poorly drained clayey soil with firm consistence and high clay content in the substratum, on a 1% slope, would be identified as: 453BH.
- d. A very poorly drained organic soil located on the tidal marsh would be identified as: 691BH
- e. An area of well drained glacial till where bedrock is present, and the shallow soils are so intermixed with deep soils that they cannot be separated, on a 16% slope, would be identified as: 22XDH.
- f. An area that was filled with sandy soil material that meets the Standards for Fill Material, on a 4% slope, and is excessively drained, would be identified as; 161BH.

g. An area that was filled with stumps and concrete blocks such that the fill material would not meet the Standards for Fill Material, on a 2% slope, and the depth to a seasonal high water table could not be determined, would be identified as: 766BH.

#### INTENSITY SOIL MAP IDENTIFIER

The H is placed at the end of the soil type to identify the area mapped as meeting the standards for high intensity soil maps. If, as a preliminary planning tool, a soil map is made that does not meet the standards, but the soil scientist still prefers to use the connotative legend to identify the soils, a P (signifying a preliminary map) will be used in place of the H, i.e. 111CP. Maps made with soil types ending with P do not meet the standards for high intensity soil maps and are not intended to be used for wetland ordinances, lot size by soil type regulations, etc.